WASTE ENCAPSULTION AND STORAGE FACILITY ADDENDUM G PERSONNEL TRAINING CHANGE CONTROL LOG

Change Control Logs ensure that changes to this unit are performed in a methodical, controlled, coordinated, and transparent manner. Each unit addendum will have its own change control log with a modification history table. The "**Modification Number**" represents Ecology's method for tracking the different versions of the permit. This log will serve as an up to date record of modifications and version history of the unit.

Modification History Table

Modification Date	Modification Number
11/16/2020	8C.2020.10F

WA7890008967 Hanford Facility RCRA Permit Dangerous Waste Portion

1	
2	WASTE ENCAPSULTION AND STORAGE FACILITY
3	ADDENDUM G
4	PERSONNEL TRAINING
5	
6	

1
2
3
4
5

1 2 3 4		ADDENDUM G PERSONNEL TRAINING	
5 6	TABLE	OF CONTENTS	
7	G.1	Introduction	5
8	G.1.1	Introductory and Continuing Training Program	5
9	G.1.1.1	Introductory Training	5
10	G.1.1.2	Continuing Training	6
11	G.2	Description of Training Program	6
12	G.2.1	Qualification of Staff (Including On-the-Job Training)	7
13	G.2.2	Review of the Training Program	7
14	G.3	Description of Training Plan	8
15			
16	TABLES	3	
17	Table G-	1 Personnel Training	9
18	Table G-2	2 Waste Encapsulation and Storage Facility Job Description	15
19			
20			

1
2
3
4
_

1 G.1 Introduction

- 2 This addendum discusses personnel training requirements based on Washington Administrative Code
- 3 (WAC) 173-303, Dangerous Waste Regulations, and WA7890008967, Hanford Facility Resource
- 4 Conservation and Recovery Act Permit (hereinafter called Hanford Facility RCRA Permit) for the
- 5 Waste Encapsulation and Storage Facility (WESF) Operating Unit Group (OUG).
- 6 Permittees will comply with the training outlined in Tables G-1, which provide the training requirements
- 7 for Hanford Facility personnel associated with dangerous and/or mixed waste management activities at
- 8 the WESF.

9

17

18

19

20 21

22

G.1.1 Introductory and Continuing Training Program

- 10 The Dangerous Waste Training Program consists of introductory and continuing training that are
- designed to prepare personnel to manage and maintain WESF in a safe, effective, and environmentally
- 12 sound manner. In addition to preparing personnel to manage and maintain WESF under normal
- 13 conditions, the training program ensures that personnel are prepared to respond in a prompt and effective
- manner, should abnormal or emergency conditions occur. Emergency response training is consistent with
- the description of actions contained in Addendum J, "Contingency Plan."
- 16 The introductory and continuing training programs contain the following objectives:
 - Teach Hanford Facility personnel to perform their duties in a way that ensures compliance with WAC 173-303.
 - Teach Hanford Facility personnel dangerous waste management activities (including implementation of the Contingency Plan) relevant to the job titles/positions in which they are employed.
 - Ensure Hanford Facility personnel can respond effectively to emergencies.
- 23 The introductory and continuing training programs meet the requirements of WAC 173-303-330,
- 24 Personnel training, through general Hanford Facility training, Contingency Plan training, Emergency
- 25 Coordinator training, and Operations training as outlined in this section.

26 G.1.1.1 Introductory Training

- 27 Introductory training includes general Hanford Facility training and unit-group specific training. General
- 28 Hanford Facility training is described below. Unit-group specific training is provided to the WESF
- 29 personnel allowing those personnel to work unescorted, and in some cases, is required for escorted access.
- 30 Personnel cannot perform a task for which they are not properly trained, except to gain required
- 31 experience while under the direct supervision of a supervisor or coworker who is properly trained, as
- described in Section G.2.1. Personnel must be trained within 6 months after their employment at or
- assignment to the Hanford Facility, or to a new job title/position at the Hanford Facility, whichever is
- 34 later

39

- 35 General Hanford Facility Training: Hanford Facility personnel will receive general Hanford Facility
- 36 training described in Hanford Facility RCRA Permit Attachment 5, Hanford Facility Personnel Training
- 37 *Program*, within 6 months of hire. This training provides an orientation on dangerous waste management
- 38 activities conducted at the Hanford Facility and includes the following:
 - Description of emergency signals and appropriate personnel response.
- Identification of contacts for information regarding dangerous waste management activities.
- Introduction to waste minimization concepts.
- Identification of contact(s) for emergencies involving dangerous waste.
- Familiarization with the applicable portions of the Hanford Facility RCRA Permit Attachment 4, 44 Hanford Emergency Management Plan (DOE/RL-94-02).

- 1 The Permittees will provide the necessary training to non-WESF personnel or visitors as appropriate for
- the locations and activities undertaken. Non-WESF personnel or visitors include individuals not
- 3 permanently assigned exclusively to WESF and who do not have dangerous waste management
- 4 responsibilities or supervision of such activities. These individuals include but are not limited to
- 5 administrative personnel, regulatory oversight, transient sampling personnel not permanently assigned to
- 6 WESF, and personnel utilized for temporary assignments. For Soil and Groundwater Samplers, refer to
- 7 Permit Attachment 8, Inspection and Training Plan for Groundwater Monitoring Wells.
- 8 <u>Contingency Plan Training</u>: WESF personnel receive training on applicable portions of DOE/RL-94-02
- 9 in the general WESF training. To ensure effective emergency response, personnel receive training on the
- 10 content of the actions described in Addendum J as well.
- 11 Emergency Coordinator Training: WESF personnel facilitating emergency coordinator duties,
- 12 WAC 173-303-360, *Emergencies*, such as the Building Emergency Director (BED) within the Hanford
- 13 Incident Command System (ICS), receive training on implementing Addendum J and ICS BED
- 14 responsibilities. These personnel must also become thoroughly familiar with applicable Contingency
- 15 Plan documentation, operations, activities, location and properties of all waste handled, location of all
- records, and the unit/building layout.
- 17 Emergency Coordinator training consists of the WESF training courses required for facility BEDs
- described in Table G-1.
- 19 Operations Training: Dangerous waste management operations training (e.g., container management
- training, shippers training) will be determined on a unit-by-unit basis and shall consider the type of
- 21 activities performed at the OUG (e.g., surveillance). Training provided for WESF operations is identified
- in Table G-1. Operations training consists of the following subjects:
- Container management.
- Waste handling.
- Container labeling.
- Position specific training as detailed in Table G-1.

27 G.1.1.2 Continuing Training

- 28 In accordance with the requirements for WAC 173-303-330(1)(b), Personnel training, dangerous waste
- 29 workers participate in an annual review of training, including general Hanford Facility training and
- unit-group specific training. The frequencies for individual training courses is described below.
- 31 General Hanford Facility Training: Annual refresher training is provided for General Hanford Facility
- training. Refer to description in Section G.1.1.
- 33 Contingency Plan Training: Annual refresher training is provided for Contingency Plan training. Refer
- to description above in Section G.1.1.
- 35 <u>Emergency Coordinator Training</u>: Annual refresher training is provided for Emergency Coordinator
- training including the BED training course (Table G-1). Refer to description above in Section G.1.1.
- 37 Operations Training: Refresher training occurs on many frequencies (i.e., annual, every other year, and
- 38 every 3 years) for operations training. When justified, some training will not contain a refresher course
- 39 and will be identified as a one time only training course. Table G-1 specifies the frequency for each
- 40 training course.

41

G.2 Description of Training Program

- 42 The Dangerous Waste Training Program is overseen by a training manager who is knowledgeable in
- 43 dangerous waste management procedures and is otherwise qualified to design a dangerous waste training

- 1 program by a combination of education and relevant experience. These qualifications are listed in
- 2 Table G-2 as required by WAC 173-303-330(2)(a).
- 3 Training elements of WAC 173-303-330(1)(e) applicable to the WESF operations include the following:
 - Procedures for using, inspecting, repairing, and replacing monitoring equipment.
 - Communications or alarm systems.
 - Response to fires or explosions.
- 7 Proper design of the training program ensures the WESF personnel responsible for facilitating these
- 8 elements are compliant with WAC 173-303 requirements. Actual job tasks, referred to as duties, include
- 9 the above-referenced elements and are used to determine training requirements. As such, the WESF
- 10 personnel receive training pertinent to the duties they perform. The WESF duties are outlined in
- 11 Table G-2. Table G-1 contain specific information regarding the training requirements for WESF
- 12 personnel.

4

5

6

13 G.2.1 Qualification of Staff (Including On-the-Job Training)

- 14 Training consists of a combination of self-study, classroom instruction, computer-based training, and
- on-the-job training (OJT) through the use of a qualification card.
- 16 A qualification card is the formal mechanism used to document the specialized training and performance
- 17 requirements of a specific job/task (e.g., waste management, waste shipping, etc.). Qualification cards list
- 18 the specific courses, required reading, and OJT activities that must be completed in order for personnel to
- 19 perform the job task independently. OJT activities involve qualified personnel demonstrating a specific
- 20 task, allowing the trainee to practice the task under supervision of the qualified OJT instructor.
- 21 The trainee's knowledge and skills are then evaluated against established standards. This can include
- written and/or oral examinations, evaluations, and reviews to ensure that they are adequately trained
- commensurate to their job title(s)/position(s). Results of examinations, evaluations, and reviews are
- documented. Completed checklists, examinations and evaluations are placed in each individual's training
- 25 record.

31

34

35

36 37

38

39

40

41 42

43

- 26 These qualification cards are generally required to be completed within 6 months, as a means to record
- that personnel who perform dangerous waste activities have been provided training within 6 months of
- assignment. Qualification/proficiency training may, of necessity and in accordance with the provisions of
- 29 collective bargaining agreements, take longer than 6 months to complete. In no case would unqualified
- 30 personnel be allowed to complete specified tasks without direct oversight of certified personnel.

G.2.2 Review of the Training Program

- 32 Facility training provides for frequent systematic review of the various components of the training
- program through multiple processes:
 - All employees are required to complete Hanford General Employee Training (HGET) on an annual basis. This training is subject to biennial evaluation by HGET approval authorities who review, and revise HGET lessons when deemed necessary.
 - The Permittee accounts for rule changes, facility changes, observed difficulties, and staff feedback to incorporate changes to training curricula, and/or frequency to address such new or changing circumstances.
 - Another element of the training program is to ensure employees are assigned the correct training. To accomplish this, annual employee training plan reviews are conducted by assigned managers.
 - At the student level, the effectiveness of the training program is determined by reviewing student feedback (e.g. evaluation forms) and evaluating student performance (e.g. test scores). Any

- 1 changes deemed necessary to the training will be addressed with a revision and documented in 2 the operating record.
 - The training matrices, (Table G-1) included in this addendum, indicate regularly scheduled (required) refresher training frequencies of individual courses for the express purpose of ensuring a regimented review of course material at a topical level on a specified interval.

G.3 Description of Training Plan

- The WAC 173-303-330 requirements for training are satisfied by this addendum. A description of how documentation meets the three items in WAC 173-303-330(2) is as follows:
- 9 WAC 173-303-330(2)(a): "...the job title, the job description, and the name of the 10 employee filling each job. The job description must include the requisite skills, education, other qualifications, and duties for each position." 11
- 12 Description: The specific personnel job title/position is correlated to the dangerous waste management
- 13 duties. Dangerous waste management duties relating to WAC 173-303 are correlated to training courses
- 14 to verify that training is properly assigned.
- 15 Only names of the WESF personnel who carry out duties relating to unit-group dangerous waste
- 16 management activities are maintained. A list of personnel assigned to the WESF is available upon
- 17 request.

34

35

36

3

4

5

6

7

8

- 18 A summary of requisite skills, education, and other qualifications for job title(s)/position(s) is
- 19 summarized in Table G-2. Detailed information concerning job title, requisite skills, education, and other
- 20 qualifications for personnel can be provided upon request.
- 21 WAC 173-303-330(2)(b): "A written description of the type and amount of both 22 introductory and continuing training required for each position."
- 23 Description: In addition to the outline provided in Section G.1, training courses developed to comply
- 24 with the introductory and continuing training programs are identified and described in Table G-1. Certain
- 25 job titles/positions identified in Table G-1 may have some variability of task assignment/responsibility.
- Personnel assigned specific dangerous waste management duties within a job title/position are only 26
- 27 required to take the necessary training specific to those duties. Training for assigned dangerous waste
- management duties are located in Table G-1. 28
- 29 Note that equivalent training can be used to meet the dangerous waste training requirements outlined in
- 30 Table G-1. Employees can substitute courses for the required training if the course is both similar in
- 31 nature and quality and accomplishes the duties of the position to which he or she is assigned. Personnel
- 32 must show by documentation or certification that an employee's training has resulted in training
- 33 equivalency to the training required.
 - WAC 173-303-330(2)(c): "Records documenting that facility personnel have received and completed the training required by this section. The department may require, on a case-by-case basis, that training records include employee initials or signature to verify that training was received."
- 37
- 38 Description: As specified in Permit Condition II.C.1, the Permittees will maintain documentation in
- 39 accordance with WAC 173-303-330(2) and (3) in the Hanford Facility Operating Record (WESF portion).
- 40 Note that training records are maintained in accordance with the requirements of the *Privacy Act of 1974*.
- 41 Training records for personnel are available for inspection purposes through 59 Federal Register 17091,
- 42 which gives federal, state, and local government officers "routine use" access to training records where a
- 43 regulatory program being implemented is applicable to a United States Department of Energy or
- 44 contractor program.

Table G-1 Personnel Training

Course	Course Title/Description	Frequency	Job Title/Position								
Number			SOM	SOE	Waste Shipper	Maintenance Crafts	NCO – Facility Operator & Surveillance	NCO – Manipulator Operator	ECO	BED	
	Genera	al	•	•		•				•	
000001	Hanford General Employee Training (CBT)	Annual	X	X	X	X	X	X	X	X	
	Standard alarms, chemical spills, security, hazards, signs, escorts, badge requirements, and overall safety.										
	Facility Health	& Safety							ı		
400811	WESF Orientation (CBT)	Annual	X	X	Xa	Xa	X	X	X	X	
	WESF facility overview, entry requirements, and overall safety.										
03E179	Fuels Facility Emergency and Hazard Identification Checklist ^b (CBT)	Annual	X	X	Xª	X ^a	X	X	X	X	
	Location/content of facility-specific hazards, hazard communication program, facility response actions, and waste management practices.										
	Waste Mana	gement		1		I			I	.1	
035100	Container Waste Management (Classroom)	Initial	X			X ^d	X	X			
	Waste minimization and pollution prevention, waste designation categories, recordkeeping, and container management.										
035110	Container Waste Management Refresher ^c (CBT)	Annual	X				X	X			
	Waste minimization and pollution prevention, waste designation categories, recordkeeping, and container management.										
02006G	Waste Management Awareness (Classroom)	Initial				X ^d					
	Introductory waste management topics, waste minimization, notifications, spills, and recordkeeping.										

Table G-1 Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position								
Number			SOM	SOE	Waste Shipper	Maintenance Crafts	NCO – Facility Operator & Surveillance	NCO – Manipulator Operator	ECO	BED	
	Waste Ser	vices	•			•					
020159	Advanced Hazardous Waste Shipper Certification Training (Classroom) • Shipping techniques on hazardous waste labels, containers, packing, and manifesting.	Initial			X						
020078	Advanced Mixed Waste Shipper Certification Training ^c (Classroom) • Shipping techniques on hazardous waste labels, containers, packing, and manifesting.	Every 3 years			X						
	Facility Mana	gement	1	Į.			<u> </u>	<u> </u>	<u>I</u>		
300226	Core Fundamentals for Shift Managers in Training (OJT) Management of activities and tasks associated with emergency response, emergency or abnormal operations, inspections, and communications.	Initial	X								
404200	Waste Encapsulation and Storage Facility Shift Operations Manager Qualification (OJT, PD) Management of activities and tasks associated with emergency response, emergency or abnormal operations, inspections, communications, and capsule transfer operations ^f .	Initial	X								
404201	Waste Encapsulation and Storage Facility Shift Operations Manager Requalification ^c (PD) Management of activities and tasks associated with emergency response, emergency or abnormal operations, inspections, communications and capsule transfer operations ^f .	Every 2 years	X								

Table G-1 Personnel Training

Course Number	Course Title/Description	Frequency	y Job Title/Position							
Number			SOM	SOE	Waste Shipper	Maintenance Crafts	NCO – Facility Operator & Surveillance	NCO – Manipulator Operator	ECO	BED
	Facility Su	pport								
400630	Waste Encapsulation and Storage Facility Stationary Operating Engineer Qualification (OJT, PD)	Initial		X						
	 Surveillance activities, response to off-normal conditions, and duties related to the operation of WESF. 									
400632	Waste Encapsulation and Storage Facility Stationary Operating Engineer Requalification ^c (OJT, PD)	Every 2 years		X						
	Surveillance activities, response to off-normal conditions, and duties related to the operation of WESF.									
	Facility Oper	rations								
400500	Waste Encapsulation and Storage Facility NCO Surveillance and Operation Support Qualification (OJT, PD)	Initial					X			
	• Surveillance activities associated with the WESF and mandated by dangerous waste regulations.									
400502	Waste Encapsulation and Storage Facility NCO Surveillance and Operation Support Requalification ^c (OJT, PD)	Every 2 years					X			
	Surveillance activities associated with the WESF and mandated by dangerous waste regulations.									
400470	Waste Encapsulation and Storage Facility Manipulator Operator (OJT, PD)	Initial						X		
	Activities associated with manipulator operation for capsule handling.									

Table G-1 Personnel Training

Course Number	Course Title/Description	Frequency	Job Title/Position								
Number			SOM	SOE	Waste Shipper	Maintenance Crafts	NCO – Facility Operator & Surveillance	NCO – Manipulator Operator	ECO	BED	
400472	Waste Encapsulation and Storage Facility Manipulator Operator Requalification ^c (OJT, PD) • Activities associated with manipulator operation for capsule handling.	Every 2 years						X			
TBD	Waste Encapsulation and Storage Facility Capsule Transfer Operations for NCO (XXXX) ^f • Activities associated with capsule transfer operations.	Initial					X	X			
TBD	Waste Encapsulation and Storage Facility Capsule Transfer Operations for NCO Requalification ^c (XXXX) ^f • Activities associated with capsule transfer operations.	Every 2 years					X	X			
	Environme	ental									
600100	Environmental Compliance Officer – Core (OJT) Knowledge of environmental regulations, permits, regulator inspections and notifications, recordkeeping, and pollution prevention practices.	Initial							X		
705610	Fuels Storage – Environmental Compliance Officer (OJT) • Facility-specific environmental requirements and processes, including management of regulated waste and environmental impacts from operations.	Initial							Xe		
	Building Eme	ergency									
02028B	Building Emergency Director Initial Training (Classroom) BED performance expectations and responsibilities as outlined in DOE/RL-94-02 for preparation, response, and recovery from emergency events at respective facility.	Initial								X	

Table G-1 Personnel Training

Course Number	Course Title/Description	Frequency	y Job Title/Position			ion				
Number			SOM	SOE	Waste Shipper	Maintenance Crafts	NCO – Facility Operator & Surveillance	NCO – Manipulator Operator	ECO	BED
037515	Building Emergency Director Refresher Training ^c (CBT)	Annual								X
	 Refresher for BED performance expectations and responsibilities as outlined in DOE/RL-94-02. 									
304457	Waste Encapsulation and Storage Facility Building Emergency Director Qualification Card Checklist (OJT)	Initial								X
	 Facility-specific emergency response and emergency action levels. 									

^aPersonnel that do not have this training will be escorted.

^fCapsule transfer training will apply upon initiation of capsule transfer activities.

BED = Building Emergency Director PD = Performance Demonstration

CBT = Computer Based Training SOE = Stationary Operating Engineer

ECO = Environmental Compliance Officer SOM = Shift Operations Manager

NCO = Nuclear Chemical Operator TBD = To be Determined

OJT = On-the-Job Training

^bPersonnel may have training in course 03E179 or 03E079.

^cRefresher/requalification training is taken only after the initial training is completed.

^dMaintenance Crafts may take course 02006G or 035100. Course 02006G is an awareness level class that satisfies the requirements of the job duties. Course 035100 is an operational level class that satisfies and exceeds the requirements identified in course 02006G.

^eRequired training only for permanently assigned ECO.

1	
2	
3	
4	This page intentionally left blank.
5	

Table G-2 Waste Encapsulation and Storage Facility Job Description

Job Title/Position	Job Description	1
	Duties	Requisite Skills, Education, Other Qualifications
Shift Operations Manager (SOM)	 Report discovered spills and releases. Evacuate or take cover in response to specific incidents. Use emergency and monitoring equipment. Respond to and use communications or alarm systems. Respond to fires or explosions. Respond to abnormal conditions and alarm systems. Manage transfers of dangerous or mixed waste. Ensure corrective actions are addressed for problems identified by inspections. Prepare and submit environmental records. 	Requisite skills Three years of nuclear facility experience, or education/experience equivalent Education High School Diploma Other qualifications None
Stationary Operations Engineer (SOE)	 Report discovered spills and releases. Evacuate or take cover in response to specific incidents. Respond to abnormal conditions and alarm systems. Perform Treatment, Storage, and Disposal (TSD) inspections and notify operations management of problems encountered during inspections. Prepare and submit environmental reports. 	Requisite skills One year job-related experience Education None Other qualifications None
Waste Shippers	 Report discovered spills and releases. Evacuate or take cover in response to specific incidents. Prepare and certify waste shipment documentation for transfer of waste. Prepare and submit environmental records. 	Requisite skills None Education High school diploma Other qualifications None
Maintenance Crafts	 Report discovered spills and releases. Evacuate or take cover in response to specific incidents. Routine maintenance within the TSD Facility. Replace and repair emergency and monitoring equipment. Prepare and submit environmental records. 	Requisite skills One year maintenance related experience Education None Other qualifications None

Table G-2 Waste Encapsulation and Storage Facility Job Description

Job Title/Position		Job Description		
		Duties	Requisite Skills, Education, Other Qualifications	
Nuclear Chemical Operator (NCO)	Facility Operator & Surveillance	Report discovered spills and releases.	Requisite skills	
		Evacuate or take cover in response to specific	None	
		incidents.	<u>Education</u>	
		Use emergency and monitoring equipment.	High school diploma or	
		Replace and repair emergency and monitoring equipment.	equivalent Other qualification	
		Respond to and use communications or alarm systems.	None	
		Respond to fires or explosions.		
		Perform TSD inspections and notify operations management of problems encountered during inspections.		
		Prepare and submit environmental records.		
	Manipulator Operator	Report discovered spills and releases.	Requisite skills	
		Evacuate or take cover in response to specific	None	
		incidents.	Education	
		Use emergency and monitoring equipment.	High school diploma or	
		Respond to and use communications or alarm systems.	equivalent Other qualification	
		Respond to fires or explosions.	None	
		Perform capsule handling using manipulators.		
		Prepare and submit environmental records.		
Environme		Report discovered spills and releases.	Requisite skills	
Compliance Officer (ECO)		Evacuate or take cover in response to specific incidents.	Experience with environmental regulations	
		Ensure operations are consistent with	Education	
		requirements contained in Dangerous Waste Regulations, WAC 173-303.	Bachelor of Arts or Bachelor of Science degree in a technical	
		Prepare and submit environmental records.	discipline or an equivalent combination of education and experience.	
			Other qualifications	
			None	

Table G-2 Waste Encapsulation and Storage Facility Job Description

Job Title/Position	Job Description		
	Duties	Requisite Skills, Education, Other Qualifications	
Building Emergency Director (BED)	 Report discovered spills and releases. Evacuate or take cover in response to specific incidents. Respond to and use communications or alarm systems. Provide direction during emergencies, evacuation or take cover. Perform RCRA Emergency Coordinator duties as the BED in Hanford Incident Command System. Prepare and submit environmental records. 	Requisite skills Three years nuclear facility experience Education High school diploma or equivalent Other qualifications None	
Training Manager	 Ensure the application of a graded, systematic approach to training program development and administration. Ensure the training program will comply with WAC 173-303. Approve training program content and provide final approval. 	Requisite skills Four-years nuclear facility experience Education Bachelor of Science or Bachelor of Arts Other qualifications None	

RCRA = Resource Conservation and Recovery Act of 1976

WESF = Waste Encapsulation and Storage Facility

1	
2	
3	
4	
5	